

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Q' 1. (currently amended) An apparatus for generating
outputted moving picture data producing apparatus to which
derived from inputted non-compression uncompressed moving
picture data is input, said apparatus comprising:
compression means including quantization means for
generating compressed moving picture data from said
uncompressed moving picture data; and
rate correction data producing means for producing rate
correction data to be added to said compressed
moving picture data to generate said outputted
moving picture data which is used by another
apparatus to change the bit rate of said compressed
moving picture data at a time of bit rate change,
whereby ~~moving picture data having the rate~~
~~correction data other than normal moving picture~~
~~stream is produced.~~

2. (currently amended) The A moving picture data
~~producing apparatus according to Claim 1, wherein said rate~~
correction data producing means creates rate correction data
which enables rate changing by said another apparatus by
conducting a eenducts quantization for an area having high bit
rate in motion picture frames, while using quantization value
which is different from a value used when producing the
compressed said quantization means on an area in which the bit
generation amount in each frame of the moving picture data is
large, and the rate correction data by which the rate change
is possible, is produced.

1 3. (currently amended) The A moving picture data
2 ~~producing~~ apparatus according to Claim 1, wherein said rate
3 correction data producing means creates rate correction data
4 which enable bit rate changing by said another apparatus by
5 conducting a different quantization for the area[[,]] in a P
6 frame of the compressed moving picture data having a low
7 probability of being referred to in a motion prediction
8 operation., ~~conducts the quantization different from the~~
9 ~~quantization means on an area in which the provability~~
10 ~~referred at the time of the motion estimation time is low, and~~
11 ~~the rate correction data in which the rate change is possible,~~
12 ~~is produced.~~

1 4. (currently amended) The A moving picture data
2 ~~producing~~ apparatus according to any one of Claims 1 to 3,
3 wherein said compression means further includes: further
4 comprising:
5 means for recording reference inhibition area information
6 which shows about an area not to be referred to for
7 motion compensation, wherein the area information is
8 included in having the rate correction data in for
9 each frame of the moving picture data; and
10 motion compensation means for conducting motion
11 compensation without referring to the, ~~wherein, when~~
12 ~~motion estimation in the next frame is performed, an~~
13 area not to be referred to in conducting motion
14 prediction for a next frame shown by the reference
15 ~~inhibition area information shows is inhibited from~~
16 referring.

1 5. (currently amended) The A moving picture data
2 ~~producing~~ apparatus according to Claim 1, wherein said
3 compression means includes further comprising: motion

4 compensation means for conducting motion compensation and
5 outputting the referenced area information referred to at the
6 a time of the motion estimation; and wherein
7 said rate correction data producing means uses the
8 referenced area information creates and selects the area rate
9 correction data which enables rate changing by said another
10 apparatus by conducting a quantization for an area a low
11 probability of being referred to in conducting motion
12 prediction for the next frame, while using quantization value
13 which is different from a value used when producing the
14 compressed moving picture data in which the referenced degree
15 is low in the frame, so that the rate correction data by which
16 the rate change is possible with respect to the selected area
17 is produced.

Q' 1 6. (currently amended) The A-moving picture data
2 producing apparatus according to Claim 1, wherein said rate
3 correction data producing means deletes high frequency
4 components from input uncompressed an original image moving
5 picture data in advance, and then conducts the same produces
6 said rate correction data which enables rate changing by said
7 another apparatus by conducting a quantization using a as said
8 quantization value equivalent to a value used when producing
9 the compressed moving picture data means, and produces the
10 rate correction data by which the rate change is possible.

1 7. (currently amended) The A-moving picture data
2 producing apparatus according to Claim 1, wherein said rate
3 correction data producing means decides determines position
4 information identifying a position at which rear portions of
5 bits in packets of said compressed motion picture data can be
6 deleted[[,]] with respect to an area structured by a
7 continuous arbitrary number of macro-blocks (for example, 16 x
8 16 pixels), and produces the rate correction data in which

9 ~~including the position information is recorded, by which the~~
10 ~~rate change is possible.~~

1 8. (currently amended) ~~The A moving picture data~~
2 ~~producing apparatus according to Claim 1, wherein said rate~~
3 ~~correction data producing means produces rate correction data~~
4 ~~which enables the bit rate changing by said another apparatus~~
5 ~~by creating an I-frame as well as P-frame with respect to the~~
6 ~~motion picture frames generated as P-frame by said compression~~
7 ~~means. an I frame which is a coding image inside the frame,~~
8 ~~and produces the rate correction data by which the rate change~~
9 ~~is possible.~~

1 9. (currently amended) A moving picture data producing
2 apparatus to which ~~non-compression~~ uncompressed moving picture
3 data is input, comprising:

4 compression means including quantization means for
5 generating compressed moving picture data from said
6 uncompressed moving picture data; and
7 rate correction data producing means for producing the
8 rate correction data to be added to said compressed
9 moving picture data to generate said outputted
10 moving picture data which is the data used by
11 another apparatus to change the bit rate of said
12 compressed moving picture data, when the bit rate is
13 changed; and

14 means wherein said rate correction data producing means
15 includes a quarry-out area for deciding means a
16 quarry out a part area which decides an area which
17 is able to partially quarry out in a frame of moving
18 picture data, and
19 said rate correction data producing means creates said
20 rate correction data for region in the quarry out
21 area thus decided by quarrying out a part of a frame

22 ~~to able to decoding, whereby moving picture data~~
23 ~~having the rate correction data other than normal~~
24 ~~moving picture stream is produced.~~

1 10. (currently amended) ~~The A moving picture data~~
2 ~~producing~~ apparatus according to Claim 9, wherein the rate
3 correction data producing means produces the rate correction
4 data which enables rate changing by said another apparatus for
5 at least one or more areas within said quarry out area. ~~the~~
6 ~~rate change is possible, to at least one of areas in~~
7 ~~respective quarry out areas in each frame.~~

Q' 1 11. (currently amended) ~~The A moving picture data~~
2 ~~producing~~ apparatus according to Claim 9, further comprising
3 motion compensation means for conducting a motion compensation
4 operation in that only corresponding portion in the quarry-out
5 area is referred when the motion compensation for quarry out
6 area, in which it is inhibited to refer an area having the
7 rate correction data in the preceding frame and to a different
8 quarry out area to conduct motion estimation.

1 12. (currently amended) A moving picture coding apparatus
2 ~~for producing and outputting moving picture data whose bit~~
3 ~~rate is different from input moving picture data which is~~
4 ~~previously compression coded, said apparatus comprising:~~
5 bit rate correction means ~~by which the~~ for selecting bit
6 rate correction data for each frame from moving
7 picture data input to apparatus so as to fit with a
8 bit rate to be output, and replace the selected is
9 changed by referring to rate correction data
10 contained with compressed in said input moving
11 picture data, whereby so that another moving picture
12 data having different bit rate is synthesized,
13 wherein the bit rate is changed while the input

14 ~~moving picture data is not decoded based on said~~
15 ~~rate correction data without decoding all of said~~
16 ~~inputted moving picture data.~~

1 13. (currently amended) ~~The A moving picture coding~~
2 ~~apparatus according to Claim 12, wherein said bit rate~~
3 ~~correction means uses the rate correction data to change the~~
4 ~~bit rate of said encoded moving picture data according to a~~
5 ~~different desired bit rate to output a modified moving picture~~
6 ~~data at the desired bit rate. whose bit amount is different,~~
7 ~~included in the inputted moving picture data, and by replacing~~
8 ~~the previously coded moving picture data, corresponding to the~~
9 ~~objective bit rate, the bit rate change is conducted.~~

Q 1 14. (currently amended) ~~The A moving picture coding~~
2 ~~apparatus according to Claim 12, wherein said rate correction~~
3 ~~data includes bit deletion data identifying bits in said~~
4 ~~encoded picture data which can be deleted, and further wherein~~
5 ~~said bit rate correction means selects uses said bit deletion~~
6 ~~data to delete some number of said bits to output modified~~
7 ~~moving picture data at a different desired bit rate. an area~~
8 ~~in which the bit can be deleted, shown in the rate correction~~
9 ~~data included in the input moving picture data corresponding~~
10 ~~to the objective bit rate, and by deleting the bit, the bit~~
11 ~~rate change is conducted.~~

1 15. (new) A moving picture encoding apparatus comprising:
2 means for inputting uncompressed moving picture data;
3 means for generating compressed moving picture data
4 including encoded video packets generated from said
5 uncompressed moving picture data;
6 means for producing rate correction data including
7 information about said encoded video packets,
8 wherein said rate correction data can be used for

9 changing a bit rate of said compressed moving
10 picture data without decoding said encoded video
11 packets; and
12 means for adding said rate correction data to said
13 compressed moving picture data for outputting
14 outputted moving picture data.

a 1 16. (new) The apparatus of claim 15, wherein said
2 information in said rate correction data includes information
3 identifying less important bits of said encoded video packets,
4 and wherein said changing the bit rate of said compressed
5 moving picture data is done by stripping some number of said
6 less important bits from some number of said encoded video
7 packets without decoding said some number of said encoded
8 video packets.

1 17. (new) The apparatus of claim 15, wherein said means
2 of producing said rate correction data includes means for
3 deciding a deletion area of a frame in said moving picture
4 data for generating deletion area data for including in said
5 information in said rate correction data.

1 18. (new) A moving picture transforming apparatus for
2 changing the bit rate of said outputted moving picture data
3 produced by the encoding apparatus according to claim 17, said
4 transforming apparatus comprising:
5 means for inputting said outputted moving picture
6 apparatus;
7 means for retrieving said rate correction data from said
8 outputted moving picture data; and
9 means for changing the bit rate of said outputted moving
10 picture data by utilizing said rate correction data
11 to delete said deletion area without decoding all of

12 said encoded video packets of said outputted moving
13 picture data.

1 19. (new) A moving picture transforming apparatus for
2 changing the bit rate of said outputted moving picture data
3 produced by the encoding apparatus according to claim 16, said
4 transforming apparatus comprising:
5 means for inputting said outputted moving picture
6 apparatus;
7 means for retrieving said rate correction data from said
8 outputted moving picture data; and
9 means for changing the bit rate of said outputted moving
10 picture data by utilizing said rate correction data
11 for stripping said some number of said less
12 important bits without decoding all of said encoded
13 video packets of said outputted moving picture data.

1 20. (new) A moving picture transforming apparatus for
2 changing the bit rate of said outputted moving picture data
3 produced by the encoding apparatus according to claim 15, said
4 transforming apparatus comprising:
5 means for inputting said outputted moving picture
6 apparatus;
7 means for retrieving said rate correction data from said
8 outputted moving picture data; and
9 means for changing the bit rate of said outputted moving
10 picture data by utilizing said rate correction data,
11 wherein the bit rate is changed without decoding all
12 of said encoded video packets of said outputted
13 moving picture data.